Louisville Metro Air Pollution Control District

Permit Application and Renewal
Form AP-100D

Exhaust Stack Information

Deliver application to:
850 Barret Avenue
Louisville, KY 40204

(502) 574-6000
FAX: (502) 574-5137
www.louisvilleky.gov/apcd
airpermits@louisvilleky.gov

Plant Name:	Plant ID:
Associated process equipment:	Emission Process/Point:
Date of submission:	

Exhaust Process/Point Information

Stack ID:		
Description of exhaust point (stack, vent, roof monitor, indoors, etc):		
Distance to nearest plant boundary from exhaust point discharge:		
Discharge height above grade :		Good Engineering Practice (GEP) height:
Diameter (or equivalent diameter) of exhaust point:		
Exit gas flow rate:	Maximum (ACFM) -	Minimum (ACFM) -
Exit gas temperature:	@ maximum airflow - °	@ minimum airflow - °
Orientation of exhaust:		Is there a stack cap? ☐ Yes ☐ No
Stack location: Latitude -		Longitude -

Stack Site Information

Dimensions of building on which exhaust point is located:	Length -	Width -	Height -
Location of stack relative to building:	Distance from North edge -		Distance from East edge -
Distance to nearest building :		Direction to Nearest building:	
Dimensions of the nearest building:	Length -	Width -	Height -

Instructions for Exhaust Stack Information
Form AP-100D

General Information

Company Name Enter the company name exactly as it appears in Form AP-100A.

Company ID This is the identification number assigned to the source by the District. If this application is for a new source for which an ID has not been assigned, the applicant should leave this space blank.

Exhaust Point Information

Stack ID Enter the Stack ID number. Cross reference to the number on the plot plan and the identification made on Form AP-100C.

GEP Height As defined in 40 CFR 51.100(ii), Good Engineering Practice (GEP) Stack Height means the greater of:

a) 65 meters, measured from the ground-level elevation at the base of the stack;

b) For stacks in existence on January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals,

$$H_s = 2.5H$$

c) For all other stacks,

$$H_s = H + 1.5L$$

Where

H_s = Good engineering practice stack height, measured from the ground-level elevation at the base of the stack;

H = Height of nearby structure(s) measured from the ground-level elevation at the base of the stack;

L = lesser dimension, height or projected width, of nearby structure(s).

Exhaust Point Diameter If exit point of the stack is square or rectangular, the equivalent diameter must be determined by the following formula:

$$\emptyset_{equiv} = 1.128\sqrt{stack\ area}$$

Orientation of Exhaust The direction that the exhaust stack directs the exhaust gas must be described here. For example, if the exhaust stack is on the side of the building with a cover point and the gas exhausts towards the ground, the direction would be stated as downward.

Stack Location The latitude and longitude of a point at the center of the stack must be provided. These coordinates can be obtained by referring to a USGS Topographic Map. Alternatively, many on-line mapping services can provide these coordinates. Provide latitude and longitude to, at least, the nearest 0.1 seconds of arc (0.00003 degrees), approximately 10 feet.

Stack Site Information

Building Dimensions If the stack is part of, or projects through, the roof of a building, enter the dimensions of the building, where the length is the dimension of the building from the nominal front to the back, the width is the dimension perpendicular to the length in the horizontal plane, and the height is the distance from ground level to the roof of the building. If any of these dimensions vary because the building is not rectilinear or the ground is not level, enter the largest dimension in that direction. Be sure to include both magnitude and dimensions of these measurements.

Stack Location **E**nter the distance from the center of the stack to the north edge of the associated building, measuring perpendicular to that edge. Similarly, enter the distance to the east edge. If the building is not aligned with the cardinal directions, use the northernmost edge running in an approximately east-west direction as the northern edge and the easternmost perpendicular edge and the eastern edge. Be sure to include both magnitude and dimensions of these measurements.

Nearest Building If the stack is not part of, or projecting through the roof of, any building, enter the shortest straight distance to the nearest building, being sure to include both the dimension and units of this measurement. Also enter the direction to this building in degrees from north.

Dimensions Enter the dimensions of the nearest building, where the length is the dimension of the building from the nominal front to the back, the width is the dimension perpendicular to the length in the horizontal plane, and the height is the distance from ground level to the roof of the building. If any of these dimensions vary because the building is not rectilinear or the ground is not level, enter the largest dimension in that direction. Be sure to include both magnitude and dimensions of these measurements.